

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
13 March 2003 (13.03.2003)

PCT

(10) International Publication Number  
**WO 03/021375 A3**

(51) International Patent Classification<sup>7</sup>: **G06F 9/46**

(21) International Application Number: **PCT/SE02/01594**

(22) International Filing Date:  
5 September 2002 (05.09.2002)

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
60/317,296 5 September 2001 (05.09.2001) **US**

(71) Applicants and

(72) Inventors: **BELIN, Sven, Johan** [SE/SE]; Orvar Odds väg 2, S-112 54 Stockholm (SE). **BLOMBERG, Mats, Göran** [SE/SE]; Karl Gerhardsväg 23, S-133 35 Salt-sjöbaden (SE). **FLYG, Pernilla, Rut, Charlotte** [SE/SE]; Sjötorpsvägen 14, S-131 34 Nacka (SE). **ÅGREN, Nils, Martin** [SE/SE]; Friherregatan 98, S-165 58 Hässelby (SE).

(74) Agents: **ALBIHNS STOCKHOLM AB** et al.; Linnégatan 2, S-114 85 Stockholm (SE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

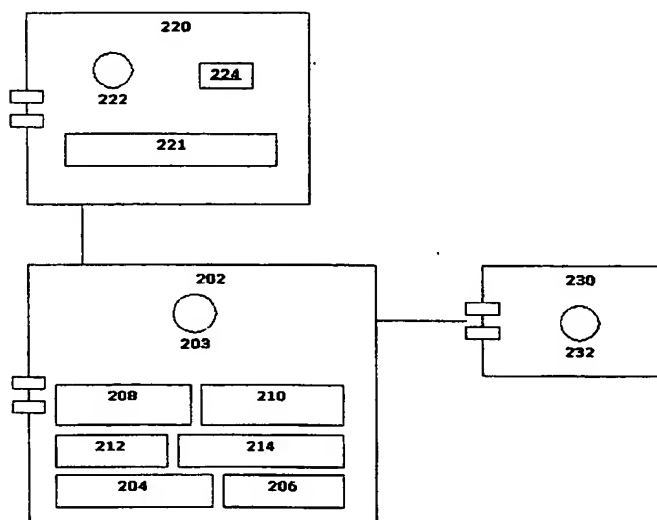
Published:

— with international search report

(88) Date of publication of the international search report:  
9 October 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **TECHNOLOGY INDEPENDENT INFORMATION MANAGEMENT**



(57) Abstract: A method, system and computer program for processing data objects in a distributed data processing system, said distributed data processing system having a plurality of software and/or hardware nodes being communicatively connectable. The method comprises the steps of defining first and second environments for processing objects at differ levels of abstraction, namely a first platform independent level and a second platform dependent level operating with different categories of object aspects. Each object is defined according to two object models, one for the platform independent environment and one for the platform dependent environment. The two object models are synchronized and object instances generated on the basis of said models are processed in the respective environments dependent on the aspects of the current object instance.

WO 03/021375 A3

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 02/01594

28 FEB 2003

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G06F 9/46

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1126681 A2 (SUN MICROSYSTEMS, INC), 22 August 2001 (22.08.01), [0059] - [0098];[0149] - [0167];[0188] - [0198]; figure 3A (chapter A). Cited in Application --	1-28
Y	GAMMA et al: Design Patterns: Elements of Reusable Object-Oriented Software. Addison-Wesley 1995. See pages 151 - 161; pages 87 - 95 --	1-21,23, 25-28
Y	VINOSKI, S : CORBA: Integrating Diverse Applications Within Distributed Heterogeneous Environments. IEEE Commun. Mag. (USA), IEEE Communications Magazine, Feb. 1997, IEEE,USA. IRN-ISSN 0163-6804, Vol.35, no.2, pg 46-55, see whole document --	1-21,23, 25-28

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

12 December 2002

Date of mailing of the international search report

16-12-2002

Name and mailing address of the ISA/  
Swedish Patent Office  
Box 5055, S-102 42 STOCKHOLM  
Facsimile No. +46 8 666 02 86

Authorized officer

Jenny Forss/LR  
Telephone No. +46 8 782 25 00

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 02/01594

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	TILLEY, T. et al.: GUI framework communication via the WWW. Publ.: Asia Pacific web Conference, in "World Wid Web: Technologies and Applications for the New Millenium", pp. 297-302, Computer Science Research, Education, and Applications Press, 2000. See section 5 and figure 3 --	1
P,X	EP 1202174 A2 (NEC CORP), 2 May 2002 (02.05.02), [0036]; [0045]; [0050] - [0057] and abstract --	1
A	MEYER, B.: .Net Is Coming. Microsoft Web services platform. Publ.: computer, Aug.2001, IEEE Comput.Soc, USA, IRN-ISSN 0018-9162, Vol.34, No.8, pg.92-97. See whole document --	1-28
A	ROY, J. et al: XML: Data's Universal Language. Publ.: IT Prof. (USA), IT Professional, May-June 2000, IEEE, USA, IRN-ISSN 1520-9202, Vol.2, no.3, pg.32-36. See whole document -- -----	1-28

## INTERNATIONAL SEARCH REPORT

28/10/02

International application No.

PCT/SE 02/01594

Patent document cited in search report				Publication date		Patent family member(s)		Publication date	
EP	1126681	A2	22/08/01	EP	1117048 A			18/07/01	
				EP	1117220 A			18/07/01	
				EP	1122644 A			08/08/01	
				EP	1130510 A			05/09/01	
				EP	1132833 A			12/09/01	
				US	2001034771 A			25/10/01	
				EP	1117049 A			18/07/01	
				US	2001039540 A			08/11/01	
				EP	1117050 A			18/07/01	
				US	2001009016 A			19/07/01	
				EP	1117033 A			18/07/01	
				US	2001037417 A			01/11/01	
				EP	1117035 A			18/07/01	
				US	2001020255 A			06/09/01	
<hr/>									
EP	1202174	A2	02/05/02	JP	2002132739 A			10/05/02	
				US	2002059212 A			16/05/02	
<hr/>									